



## UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number - 09/932,605  
Filing Date - 08/17/2001  
Grp Art Unit - 1723  
Applicant - Aftab Alam

Date- October 3, 2001

Sir:

In response to communication/ notice dated 09/19/2001, please find the following documents

1. Substitute claims commencing on separate sheets
2. An abstract
3. Substitute informal copies of drawings ( 7 Sheets)
4. A copy of the notice

## REMARKS:

Missing documents are enclosed. Substitute claims commencing on separate sheets numbering pages 8-10. The abstract page is numbered page 11. Substitute informal copies of drawings are also enclosed. Formal drawing will be supplied once claims are allowed.

Should you require further information, please inform the applicant.

Respectfully,

Respectfully,

Aftab Alam  
Applicant/Inventor

## Address

500 Claytom Meadows  
St. Louis, MO 63011.



UNITED STATES PATENT AND TRADEMARK OFFICE

 COMMISSIONER FOR PATENTS  
 UNITED STATES PATENT AND TRADEMARK OFFICE  
 WASHINGTON, D.C. 20231  
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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/932,605	08/17/2001	Aftab Alam	

CONFIRMATION NO. 5073

## FORMALITIES LETTER



\*OC00000006577278\*

 AFTAB ALAM  
 500 CLAYTON MEADOWS  
 ST. LOUIS, MO 63011

Date Mailed: 09/19/2001

## NOTICE TO FILE CORRECTED APPLICATION PAPERS

*Filing Date Granted*

This application has been accorded an Application Number and Filing Date. The application, however, is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a)

The required item(s) identified below must be timely submitted to avoid abandonment:

- The Claim(s) commencing on a separate sheet (37 CFR 1.75(h)).
- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. ( 5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);
- An abstract was not provided for this application. An abstract of the technical disclosure is required under 37 CFR 1.72(b).

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center  
 Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

09/19/2001 10:00 AM



1      **What I claim my intention is**

1.      A device for application of liquid sample on a membrane, comprising:  
a reservoir having an open end and an end opposite the open end having a capillary opening,  
wherein the open end is adapted to receive liquid samples;  
a frame-means for securing the membrane for application of the liquid samples; and  
a reservoir-rack for positioning said reservoir above the membrane surface such that the  
capillary opening of the reservoir touches and contacts the membrane.
2.      The device according to claim 1 wherein the reservoir is provided as an assembly of a  
plurality of the reservoirs.
3.      The device according to claim 1 wherein said reservoir-rack have through-holes for  
positioning the reservoirs in the reservoir-rack .
4.      The device according to claim 1 wherein the reservoir-rack consists of positions for at least  
96 individual reservoirs.
5.      The device according to claim 1 wherein said reservoir-rack has positions for the reservoirs  
asymmetrically placed.
6.      The device according to claim 5 wherein said reservoir-rack is provided with a means to  
position the reservoir-rack into the device by at least two alternative ways producing two  
alternative footprints and the point of contacts on the membrane below for each reservoir  
position on the reservoir-rack.
7.      The device according to claim 5 wherein said reservoir-rack is provided with a means to  
position the reservoir-rack into the device by at least four alternative ways producing four  
alternative footprints and the point of contacts on the membrane below for each reservoir  
position on the reservoir-rack.

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8. The device according to claim 4 wherein the positions of the reservoir in said reservoir-rack is arranged in grid pattern such that it allows positioning of the reservoirs in columns and rows compatible with the application heads of the multi-sample pipetting devices common in the field and industry, (i.e. multi-channel pipetors).

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9. The device according to claim 1 wherein the frame-means is provided with a means to secure the membrane in the frame-means and position the membrane opposite the reservoir-rack.

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10. The device according to claim 1 wherein the frame-means is provided with grid marking for identifying the positions of each reservoir and/or the liquid sample applied on the membrane.

11. The device according to claim 1 wherein the capillary opening of the reservoir is a micro-pore opening protruding as a capillary tip from the main body of the reservoir.

12. The device according to claim 1 wherein the capillary opening of the reservoir has opening orifice narrow enough to prevent the free flow of the liquid samples out of the reservoir under the force of gravity.

13. The device according to claim 1 wherein the open end of the reservoir is such that liquid samples may be loaded into the reservoir through the open end.

14. The device according to claim 1 wherein the capillary opening of the reservoir allows flow of the liquid sample from the reservoir into the membrane by capillary action.

15. The device according to claim 1 wherein the capillary opening of the reservoir allows flow of the liquid sample from the reservoir into the membrane by centrifugal action.

16. The device according to claim 1 wherein the capillary opening of the reservoir may be used for taking aliquots of liquid sample using a liquid sampling pipetor placed in to open end.

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17. The device according to claim 1 wherein said reservoir may be positioned on the multi-sample pipetting device common in the field and industry, (i.e. multi-channel pipetors) for taking an aliquot of liquid sample through the capillary opening for application of the liquid samples on the membrane.

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18. The device according to claim 1 wherein the capillary opening of the reservoir is a micro-pore opening.

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19. A device for application of liquid sample on a membrane, comprising:  
a reservoir having an open end and an end opposite the open end having a capillary opening, wherein the open end is adapted to receive liquid samples and/or liquid pipetting devices for aliquoting the liquid sample through the capillary opening;  
a frame-means for securing the membrane for application of the liquid samples; and  
a reservoir-rack for positioning said reservoir above the membrane surface such that the capillary opening of the reservoir touches and contacts the membrane.

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